

**FIGURE 1**

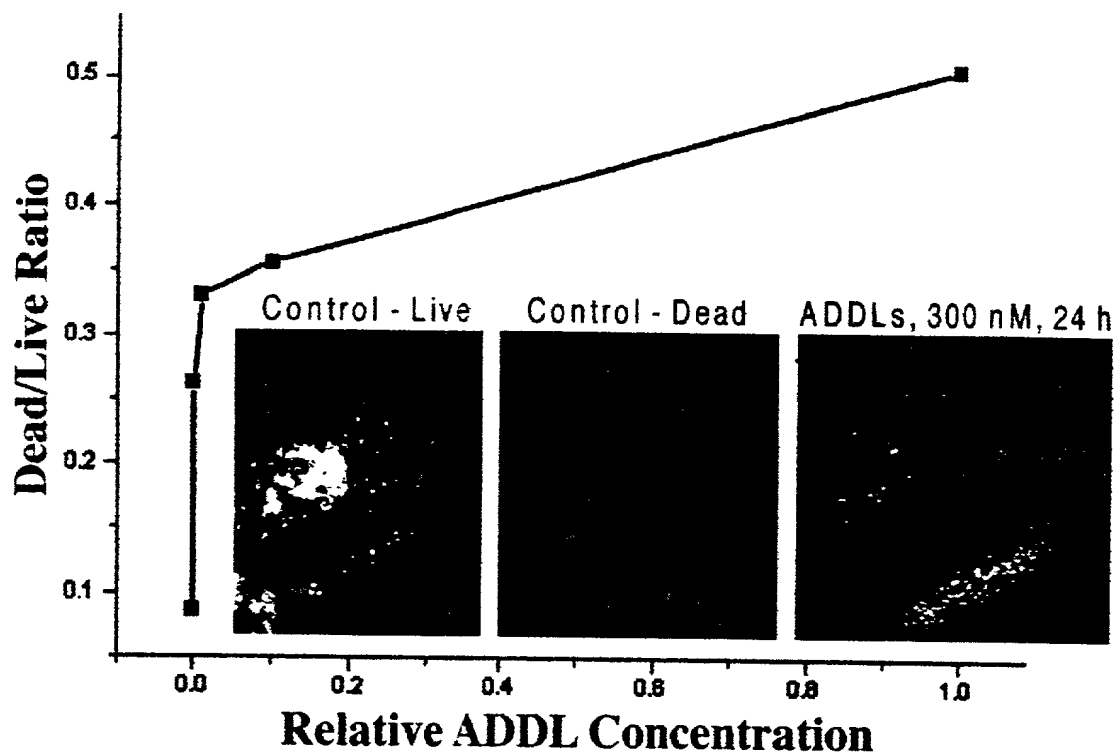


Figure 1. Neurotoxicity of ADDLs in organotypic hippocampal brain slices after ADDL treatment for 24 h, using the Dead/Live™ red/green fluorescence assay. Dose response curve represents a 1000-fold dilution from initial A $\beta$  concentration of 1.7  $\mu$ M, ADDL concentration of ca. 300 nM.

**Figure 2**

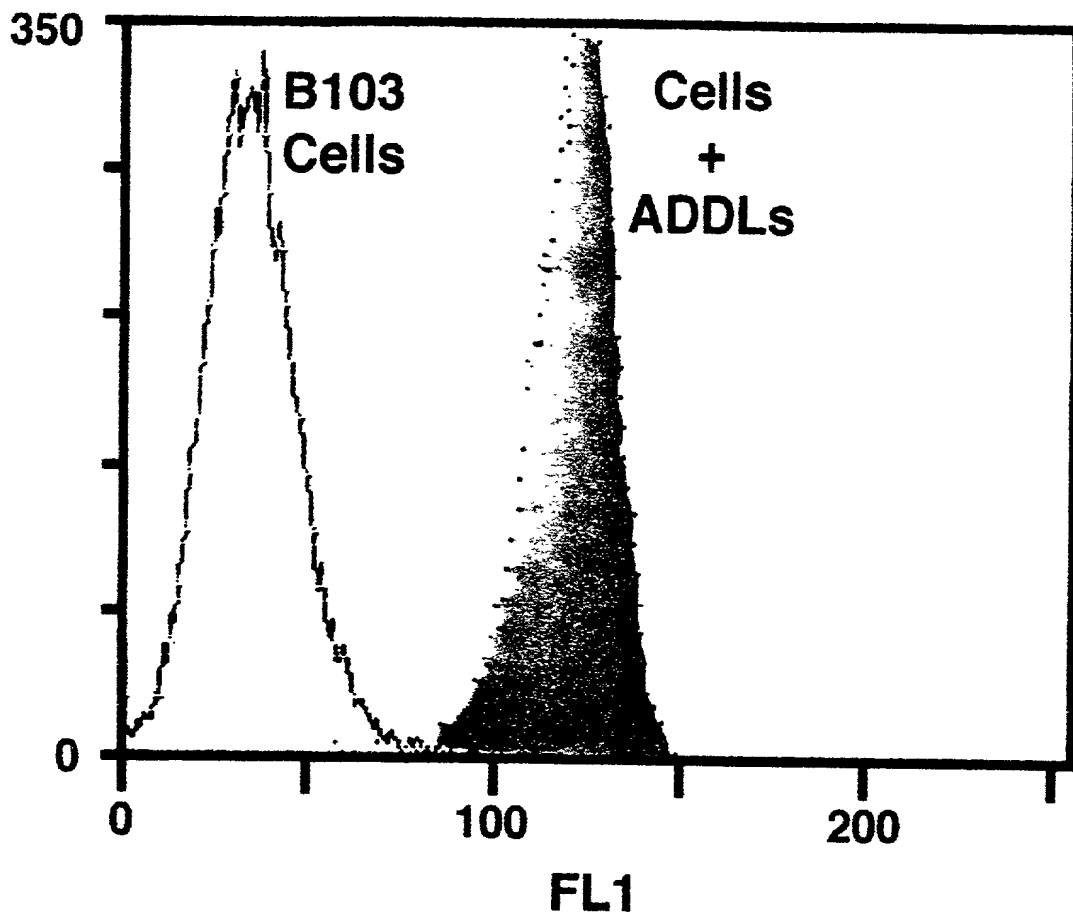


Figure 2. Analysis of binding of fluorescent labeled ADDLs to the surface of B103 rat CNS neuroblastoma cells using a fluorescence-activated cell sorter (FACS).

**Figure 3**

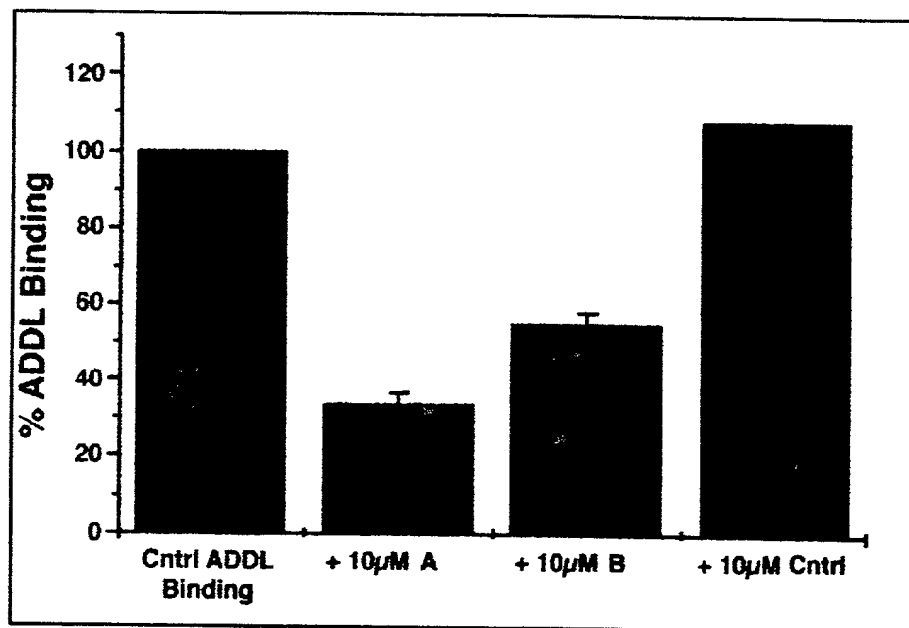


Figure 3. FACS assay identifies 2 compounds that block binding to B103 cells. Compound A is A $\beta$  1-40.

**Figure 4**

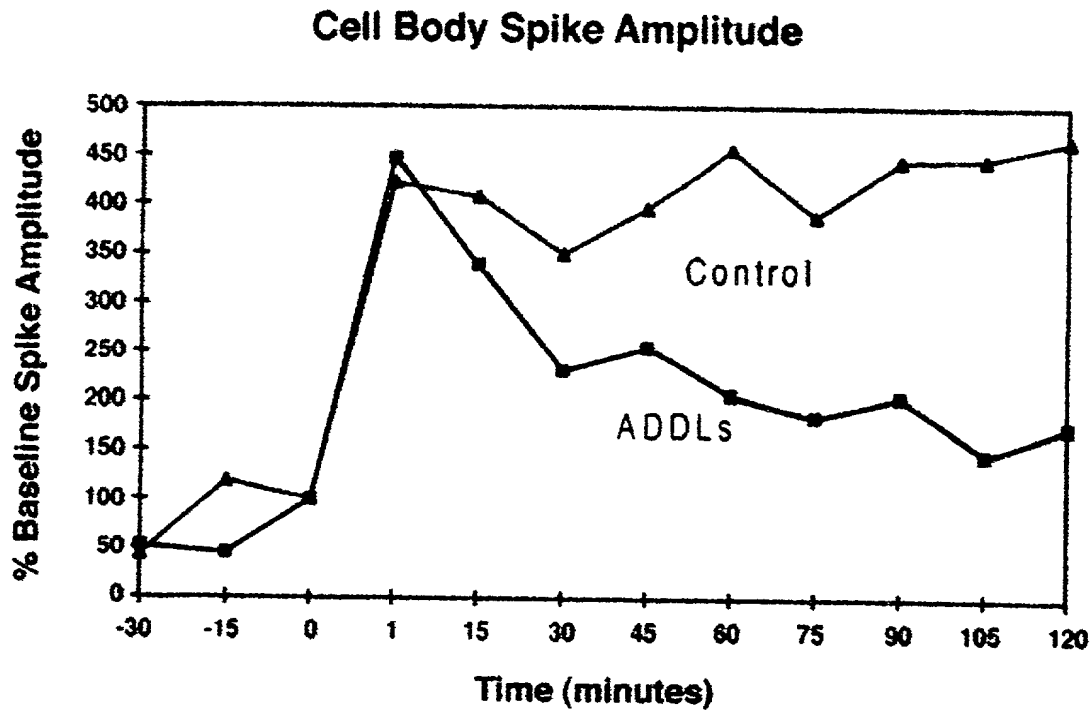


Figure 4. ADDLs block the persistence phase of LTP induced by high frequency electrical stimuli applied to entorhinal cortex and measured as cell body spike amplitude in middle molecular layer of the dentate gyrus.